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ABSTRACT

This paper (1) examines correlations of pre- and post-course scores on the Theoretical Orientation to Reading Profile with scores on the Gregorc Style Delineator; (2) augments these correlations with qualitative data from journals and interviews; and (3) proposes that, given this data, the supervisory support structures needed for pre- and inservice teachers who are concrete sequential organizers differs substantially from the support needed by teachers who are random organizers. Subjects (N=107) were enrolled in undergraduate and graduate methods courses at a midwestern university. To more effectively meld theory and practice, these courses had been restructured to emphasize socio-emergent learning theory and collaborative teaming. This study documents and analyzes the ensuing changes in student awareness of themselves as curriculum developers rather than merely curriculum consumers which resulted from this restructuring. (IAH)

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TEACHING AS INQUIRY :
 EXAMINING AND SUPPORTING THE RESTRUCTURING OF BELIEFS
 OF PRE- AND IN-SERVICE TEACHERS

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Objectives

The objectives of this paper are: (a) to examine correlations of pre- and post-course scores on the Theoretical Orientation to Reading Profile (Deford, 1985) with scores on the Gregorc Style Delineator (Gregorc, 1985); (b) to augment these correlations with qualitative data; and (c) to propose that given this data, the supervisory support structures needed for concrete sequential organizers to become more wholistic, integrative teachers, would differ substantially from the support needed by abstract random organizers.

Theoretical Perspective

The call for reflective classroom teaching has been heard at all levels (Lanier & Little, 1986; Holmes Group, 1985; Schon, 1983; VanManen, 1977). Indeed, there are indications that if we do not practice what we preach at the level of college methods instruction, the gap between theory and practice will continue to widen. Short & Burke (1989) and others have suggested that the learning theories upon which we base college level instruction need examination in light of the practices we are advocating. As we begin to make learning theory and curriculum structure in the college classroom match advocated practice, preservice teachers in methods courses will cease to view education courses as

ivory-tower theory and the effects of teacher education programs will less likely be washed out by school experience (Zeichner & Tabachnick, 1981). Likewise, in-service teachers will become more reflective practitioners (Schon, 1987), for it is within reflective classroom practice where the curriculum structure forms the base for action research and teaching becomes inquiry (Andrews, 1989).

To measure theoretical and organizational (style) orientations, we chose two validated instruments and supplemented our data with qualitative analysis of journals and interviews. Though the TORP is specific to reading theory, we chose it, 1) Because it applied immediately to the methods courses which we were directly able to influence and 2) Because a more general curriculum theory instrument does not yet exist. We believe that the theoretical orientations indicated by our students reflect their feelings about their abilities to impact curriculum structures in a broader, more global sense.

Methods and Data Source

In an effort to more effectively meld theory and practice, several undergraduate and graduate methods courses (reading, language, and social studies) at a midwestern university were restructured to emphasize socio-emergent learning theory and collaborative teaming. This

study documents and analyzes the ensuing changes in student awareness of themselves as curriculum developers rather than merely curriculum consumers which resulted from this restructuring and contributes to the small but growing body of research on teaching-as-inquiry.

Data were collected during these courses over a three year period (N=107). Quantitative data included pre and post scores from the TORP and a four segment score from the Gregorc Style Delineator. The TORP uses a Likert scale response system to determine teacher beliefs along a continuum from a highly structured phonic orientation to a more open-ended wholistic orientation. The Delineator suggests that people differ on four quadrants according to the amount of structure and sense of concreteness (from concrete sequential to abstract random) inherent within themselves. We hypothesized that the higher the concrete sequential (CS) score, the lower the pre-course TORP score would be and the greater the difference between pre-course and post-course scores.

Qualitative data included personal reflections and journals written throughout the course, student interviews, course evaluations, and instructors' transactional analyses (Andrews, 1990).

Results

Results of correlations of pre- and post-course scores on the TORP

with scores on the Gregorc showed that high CS teachers initially tended to be proponents of traditional, highly structured curriculum; low TORP pre-course scores predicted this finding. These students began to think differently about the learning opportunities in the course as a result of the peer support, supervisory feedback, and self-critique inherent in the team structure. Though still not completely comfortable with the non-traditional, less structured formats, they began to realize the implications of this learning theory for democratically run classrooms. Teachers who rated themselves as high AR preferred more open-ended curriculum methods; pre-course scores for this group were higher. They demonstrated more acceptance and flexibility toward the reflective methods experienced throughout the course.

The average gain between pre- and post-course TORP scores for CS's was greater than the gain for AR's. Our interpretation of this was that the intervention (the course) was a unique and powerful learning environment for CS's because it was both intensely meaningful and radically different from their characteristic choice of highly structured learning contexts, whereas AR's found that the course structure validated their natural style.

Analysis of qualitative data showed that the use of collaborative

learning teams with appropriately matched supervisory support contributed significantly to students' reflective practices by emphasizing the social nature of learning and reducing the risk factors which inhibit learning. Highly CS organizers began to value the socio-emergent classroom structures provided by the instructors and acknowledged learning, and themselves as learners, as social phenomena. AR organizers began to adopt new structures for curriculum organization. Data also highlighted several emerging themes: ownership, negotiation, metacognition, multiple interpretation, and self-worth.

Educational Significance

As a result of this research, we have begun to view the instructional supervision of pre-service and practicing teachers from a more wholistic, divergent perspective. We now recognize that teachers whose styles are sequential need specific strategies and support for adapting to wholisitic learning and teaching. We now regularly provide specific and regular in-class reflection on affective dimensions of learning such as how students feel about their learning, where their knowledge base originates, how their learning is supported and how it is hinders. Particularly with sequential-oriented students who views tasks as a series of steps to be accomplished, it is important to help them see

the creative, often serendipitous nature of real learning. They also need to recognize that they and their partners in learning teams have a stake in each others learning. Often sequential students are very independent, do not like sharing ideas and strategies with others, and prefer to synthesize learning from is "received" from a central recognized authority such as a professor. Wholistic strategies help them to see learning and knowledge as more fluid and dynamic, an ever evolving frame of reference rather than a series of facts to be stashed into neat compartments.

On the other hand, students whose style is random need to experience the relief and support of structure. Randoms tend to believe that structure stifles ideas and creativity. They experience learning as a series of meaningful relationships with others which can spawn interesting ideas and help them to accomplish their social agendas. Ways of structuring interactions such as literature circles, learning teams, open-ended questionnaires, agendas for group projects help random-style students to see that structure can provide needed boundaries and fertile ground for the incubation of all their wonderful ideas and relationships.

Both groups benefit from working together, consciously observing modes of operation particular to each style, and acknowledging the strengths of each style. The following strategies are particularly helpful

in giving students access to each other's styles and modes of operation:

- **"Sharing Life Experiences"** The authoring cycle begins with an acknowledge that students bring with them vast amounts of personal and professional knowledge. Despite the fact that they have not spent much time in schools in their professional roles as teachers, they have spent approximately 16 years in schools as students and are well acquainted with the life in classrooms. All background experiences serve as resources for the construction of new knowledge, both in building the professional knowledge base and in providing the "content" for demonstrations of reading and writing for learning.

- **"Uninterrupted Reading and Writing"** The student's knowledge base develops individually, as well as socially. The second aspect of this cycle, "uninterrupted reading and writing," acknowledges the importance individual time and choice in personal and in content area reading. Students may choose their own topics for reading and writing and pursue their projects in their own way.

- **"Written Drafts, Author's Circles, Revision, and Publishing"** These facets of the cycle provide a framework for assimilation, articulation, and the public sharing of new knowledge. Ownership of documents is retained by the students. Topic choices and manner of "publication" belong to students. However, the requirement to share pieces of writing and other projects allows for sharing of styles and personal strategies for accomplishing goals.

Teacher educators and administrators who understand and value style-related strengths will foster a stronger sense of individualization within the social communities of the college and public school classrooms. Schools tend to be concrete-sequential institutions. Teachers whose styles are random sometimes experience difficulty with the demands of such a structured environment. Teacher educators and administrators who recognize differing style needs will modify the work

place and their evaluation forms to acknowledge the strengths of all styles.

Finally, this study has expanded our understanding of the need for collaborative, generative relationships between professors and students, administrators and teachers, based on reflective practices. One of the most important elements to emerge from this study is the notion that one must become self-reflective and knowledgeable about one's own style in order to seek out partners and relationships which can support, expand AND challenge one's usual mode of operation. Instructional programs can then become self-adapting according to each teachers' particular needs because it is the teachers themselves who are recongizing adapting programs and relationships when there is a lack of fit.

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